CLAIMS.

What is claimed is:

1. A method of treating conditions associated with lipid oxidation, comprising: administering a composition comprising a pharmacologically effective amount of an apolipoprotein (apo) A-IV compound.
2. A method according to claim 1 wherein the apolipoprotein (apo) A-IV compound is selected from the group consisting of apolipoprotein (apo) A-IV, derivatives, analogs, homologs, fragments and mixtures thereof.
3. A method according to claim 2 wherein the apolipoprotein (apo) A-IV molecule is a peptide sequence from about 5 to about 90 amino acids in length.
4. A method according to ~~claim 3~~ Claim 1 wherein the peptide has an amino acid sequence selected from the group comprising:

Met-Phe-Leu-Lys-Ala-Val-Val-Leu-Thr-Val-Ala-Leu-Val-Ala-Ile-Thr-Gly-Thr-Gln-Ala-Glu-Val-Thr-Ser-Asp-Gln-Val-Ala-Asn-Val (SEQ ID NO:1);

Met-Trp-Asp-Tyr-Phe-Thr-Gln-Leu-Ser-Asn-Asn-Ala-Lys-Glu-Ala-Val-Glu-Gln-Leu-Gln-Lys-Thr-Asp-Val-Thr-Gln-Gln-Leu-Asn-Thr-Leu-Phe-Gln-Asp-Lys-Leu-Gly-Asn-Ile-Asn-Thr-Tyr-Ala-Asp-Asp-Leu-Gln-Asn-Lys-Leu-Val-Pro-Phe-Ala-Val-Gln-Leu-Ser-Gly-His-Leu-Thr-Lys-Glu-Thr-Glu-Arg-Val-Arg-Glu-Glu-Ile-Gln-Lys-Glu-Leu-Glu-Asp-Leu-Arg-Ala-Met-Val-Ile (SEQ ID NO:2);

Met-Leu-Pro-His-Ala-Asn-Lys-Val-Ser-Gln (SEQ ID NO:3);

Met-Phe-Gly-Asp-Asn-Val-Gln-Lys-Leu-Gln-Glu-His-Leu-Arg-Pro-Tyr-Ala-Thr-Asp-Leu-Gln-Ala-Gln-Ile-Asn-Ala-Gln-Thr-Gln-Asp (SEQ ID NO:4);

Met-Lys-Arg-Gln-Leu-Thr-Pro-Tyr-Ile-Gln-Arg (SEQ ID NO:5);

Met-Gln-Thr-Thr-Ile-Gln-Asp-Asn-Val-Glu-Asn-Leu-Gln-Ser-Ser (SEQ ID NO:6);

Met-Val-Pro-Phe-Ala-Asn-Glu-Leu-Lys-Glu-Lys-Phe-Asn-Gln-Asn (SEQ ID NO:7);

Met-Glu-Gly-Leu-Lys-Gly-Gln-Leu-Thr-Pro-Arg-Ala-Asn-Glu-Leu-Lys-Ala-Thr-Ile-Asp-Gln-Asn-Leu-Glu-Asp-Leu-Arg-Ser-Arg-Leu-Ala-Pro-Leu-Ala-Glu-Gly-Val-Gln-Glu-Lys-Leu-Asn-Ile-His-Gln (SEQ ID NO:8);

Met-Glu-Gly-Leu-Ala-Phe-Gln (SEQ ID NO:9);

Met-Lys-Lys-Asn-Ala-Glu-Glu-Leu-His-Thr-Lys-Val-Ser-Thr-Asn-Ile-Asp-Gln-Leu-Gln-Lys-Asn-Leu-Ala-Pro-Leu-Val-Glu-Asp-Val-Gln-Ser-Lys-Leu-Lys-Gly-Asn-Thr-Glu-Gly-Leu-Gln-Lys-Ser-Leu-Glu-Asp-Leu-Asn-Lys-Gln-Leu-Asp-Gln-Gln-Val-Glu-Val-Phe-Arg-Arg-Ala-Val-Glu-Pro-Leu-Gly-Asp-Lys-Phe-Asn (SEQ ID NO:10);

Met-Ala-Leu-Val-Gln-Gln (SEQ ID NO:11);

Met-Glu-Lys-Phe-Arg-Gln-Gln-Leu-Gly-Ser-Asp-Ser-Gly-Asp-Val-Glu-Ser-His-Leu-Ser-Phe-Leu-Glu-Lys-Asn-Leu-Arg-Glu-Lys-Val-Ser-Ser-Phe (SEQ ID NO:12);

Met-Ser-Thr-Leu-Gln-Lys-Lys-Gly-Ser-Pro-Asp-Gln-Pro-Leu-Ala-Leu-Pro-Leu-Pro-Glu-Gln-Val-Gln-Glu-Gln-Val-Gln-Glu-Gln-Val-Gln-Pro-Lys-Pro-Leu-Glu-Ser (SEQ ID NO:13);

derivatives, analogs, homologs, fragments and mixtures thereof.

5. A method according to ~~claim 3~~ Claim 1 wherein the composition further comprises at least one ingredient selected from the group consisting of carriers, fillers, and excipients.

6. A method according to ~~claim 3~~ Claim 1 wherein the composition further comprises a lipophilic compound.

7. A method according to claim 6 wherein the lipophilic compound is selected from the group consisting of organic solvents, phosphatidyl choline, cholesterol and mixtures thereof.

8. A method according to ~~claim 2~~ Claim 1 wherein the administering comprises oral administering.

9. A method according to ~~claim 2~~ Claim 1 wherein the administering comprises parenteral administering.

10. A method according to claim 9 wherein the administering is a dosing method selected from the group consisting of transdermal administering, subcutaneous injecting, intravenous injecting, intraperitoneal injecting, intramuscular injecting, intrasternal

injection, intrathecal injection, intraventricular injecting, intracerebroventricular injecting, and infusing.

11. A method according to ~~claim 2~~ claim 1 wherein the composition is administered in a unitary dose of from about 1 to about 1000 mg.

12. A method according to claims 11 wherein the unitary dose in administered from about 1 to about 3 time a day.

13. A method of inhibiting the progression of atherosclerosis in a patient in need thereof comprising administering to the patient an effective anti-oxidation amount of a compound of claim 1.

14. A method of treating a patient for atherosclerosis comprising administering to the patient an effective anti-oxidation amount of a compound of ~~claim 2~~ claim 4.

15. The method of ~~claim 3~~ claim 1 wherein said peptide comprises: Met-Phe-Leu-Lys-Ala-Val-Val-Leu-Thr-Val-Ala-Leu-Val-Ala-Ile-Thr-Gly-Thr-Gln-Ala-Glu-Val-Thr-Ser-Asp-Gln-Val-Ala-Asn-Val (SEQ ID NO:1);

16. The method of ~~claim 3~~ claim 11 wherein said peptide comprises: Met-Trp-Asp-Tyr-Phe-Thr-Gln-Leu-Ser-Asn-Asn-Ala-Lys-Glu-Ala-Val-Glu-Gln-Leu-Gln-Lys-Thr-Asp-Val-Thr-Gln-Gln-Leu-Asn-Thr-Leu-Phe-Gln-Asp-Lys-Leu-Gly-Asn-Ile-Asn-Thr-Tyr-Ala-Asp-Asp-Leu-Gln-Asn-Lys-Leu-Val-Pro-Phe-Ala-Val-Gln-Leu-Ser-Gly-His-Leu-Thr-Lys-Glu-Thr-Glu-Arg-Val-Arg-Glu-Glu-Ile-Gln-Lys-Glu-Leu-Glu-Asp-Leu-Arg-Ala-Met-Val-Ile (SEQ ID NO:2);

17. The method of ~~claim 3~~ claim 1 wherein said peptide comprises: Met-Leu-Pro-His-Ala-Asn-Lys-Val-Ser-Gln (SEQ ID NO:3);

18. The method of ~~claim 3~~ claim 1 wherein said peptide comprises: Met-Phe-Gly-Asp-Asn-Val-Gln-Lys-Leu-Gln-Glu-His-Leu-Arg-Pro-Tyr-Ala-Thr-Asp-Leu-Gln-Ala-Gln-Ile-Asn-Ala-Gln-Thr-Gln-Asp (SEQ ID NO:4);

19. The method of ~~claim 3~~ claim 1 wherein said peptide comprises: Met-Lys-Arg-Gln-Leu-Thr-Pro-Tyr-Ile-Gln-Arg (SEQ ID NO:5);

20. The method of ~~claim 3~~ claim 1 wherein said peptide comprises: Met-Gln-Thr-Thr-Ile-Gln-Asp-Asn-Val-Glu-Asn-Leu-Gln-Ser-Ser (SEQ ID NO:6);

21. The method of ~~claim 3~~ claim 1 wherein said peptide comprises: Met-Val-Pro-Phe-Ala-Asn-Glu-Leu-Lys-Glu-Lys-Phe-Asn-Gln-Asn (SEQ ID NO:7);

22. The method of ~~claim 3~~ claim 1 wherein said peptide comprises: Met-Glu-Gly-Leu-Lys-Gly-Gln-Leu-Thr-Pro-Arg-Ala-Asn-Glu-Leu-Lys-Ala-Thr-Ile-Asp-Gln-Asn-Leu-Glu-Asp-Leu-Arg-Ser-Arg-Leu-Ala-Pro-Leu-Ala-Glu-Gly-Val-Gln-Glu-Lys-Leu-Asn-Ile-His-Gln (SEQ ID NO:8);

23. The method of ~~claim 3~~ claim 1 wherein said peptide comprises: Met-Glu-Gly-Leu-Ala-Phe-Gln (SEQ ID NO:9);

24. The method of ~~claim 3~~ claim 1 wherein said peptide comprises: Met-Lys-Lys-Asn-Ala-Glu-Glu-Leu-His-Thr-Lys-Val-Ser-Thr-Asn-Ile-Asp-Gln-Leu-Gln-Lys-Asn-Leu-Ala-Pro-Leu-Val-Glu-Asp-Val-Gln-Ser-Lys-Leu-Lys-Gly-Asn-Thr-Glu-Gly-Leu-Gln-Lys-Ser-Leu-Glu-Asp-Leu-Asn-Lys-Gln-Leu-Asp-Gln-Gln-Val-Glu-Val-Phe-Arg-Arg-Ala-Val-Glu-Pro-Leu-Gly-Asp-Lys-Phe-Asn (SEQ ID NO:10);

25. The method of ~~claim 3~~ claim 1 wherein said peptide comprises: Met-Ala-Leu-Val-Gln-Gln (SEQ ID NO:11);

26. The method of ~~claim 3~~ claim 1 wherein said peptide comprises: Met-Glu-Lys-Phe-Arg-Gln-Gln-Leu-Gly-Ser-Asp-Ser-Gly-Asp-Val-Glu-Ser-His-Leu-Ser-Phe-Leu-Glu-Lys-Asn-Leu-Arg-Glu-Lys-Val-Ser-Ser-Phe (SEQ ID NO:12);

27. The method of ~~claim 3~~ claim 1 wherein said peptide comprises: Met-Ser-Thr-Leu-Gln-Lys-Lys-Gly-Ser-Pro-Asp-Gln-Pro-Leu-Ala-Leu-Pro-Leu-Pro-Glu-Gln-Val-Gln-Glu-Gln-Val-Gln-Glu-Gln-Val-Gln-Pro-Lys-Pro-Leu-Glu-Ser (SEQ ID NO:13);

28. A method of preventing oxidation in a lipid-containing food comprising incorporating in the food an oxidation-inhibiting amount of an apolipoprotein (apo) A-IV compound to protect the food from oxidation.

29. A method according to claim 28 wherein the apolipoprotein (apo) A-IV compound is selected from the group consisting of apolipoprotein (apo) A-IV, derivatives, analogs, homologs, fragments and mixtures thereof.

30. A method according to claim 29 wherein the apolipoprotein (apo) A-IV molecule is a peptide sequence from about 5 to about 90 amino acids in length.

31. A method according to claim 30 wherein the peptide has an amino acid sequence selected from the group comprising:

Met-Phe-Leu-Lys-Ala-Val-Val-Leu-Thr-Val-Ala-Leu-Val-Ala-Ile-Thr-Gly-Thr-Gln-Ala-Glu-Val-Thr-Ser-Asp-Gln-Val-Ala-Asn-Val (SEQ ID NO:1);

Met-Trp-Asp-Tyr-Phe-Thr-Gln-Leu-Ser-Asn-Asn-Ala-Lys-Glu-Ala-Val-Glu-Gln-Leu-Gln-Lys-Thr-Asp-Val-Thr-Gln-Gln-Leu-Asn-Thr-Leu-Phe-Gln-Asp-Lys-Leu-Gly-Asn-Ile-Asn-Thr-Tyr-Ala-Asp-Asp-Leu-Gln-Asn-Lys-Leu-Val-Pro-Phe-Ala-Val-Gln-Leu-Ser-Gly-His-Leu-Thr-Lys-Glu-Thr-Glu-Arg-Val-Arg-Glu-Glu-Ile-Gln-Lys-Glu-Leu-Glu-Asp-Leu-Arg-Ala-Met-Val-Ile (SEQ ID NO:2);

Met-Leu-Pro-His-Ala-Asn-Lys-Val-Ser-Gln (SEQ ID NO:3);

Met-Phe-Gly-Asp-Asn-Val-Gln-Lys-Leu-Gln-Glu-His-Leu-Arg-Pro-Tyr-Ala-Thr-Asp-Leu-Gln-Ala-Gln-Ile-Asn-Ala-Gln-Thr-Gln-Asp (SEQ ID NO:4);

Met-Lys-Arg-Gln-Leu-Thr-Pro-Tyr-Ile-Gln-Arg (SEQ ID NO:5);

Met-Gln-Thr-Thr-Ile-Gln-Asp-Asn-Val-Glu-Asn-Leu-Gln-Ser-Ser (SEQ ID NO:6);

Met-Val-Pro-Phe-Ala-Asn-Glu-Leu-Lys-Glu-Lys-Phe-Asn-Gln-Asn (SEQ ID NO:7);

Met-Glu-Gly-Leu-Lys-Gly-Gln-Leu-Thr-Pro-Arg-Ala-Asn-Glu-Leu-Lys-Ala-Thr-Ile-Asp-Gln-Asn-Leu-Glu-Asp-Leu-Arg-Ser-Arg-Leu-Ala-Pro-Leu-Ala-Glu-Gly-Val-Gln-Glu-Lys-Leu-Asn-Ile-His-Gln (SEQ ID NO:8);

Met-Glu-Gly-Leu-Ala-Phe-Gln (SEQ ID NO:9);

Met-Lys-Lys-Asn-Ala-Glu-Glu-Leu-His-Thr-Lys-Val-Ser-Thr-Asn-Ile-Asp-Gln-Leu-Gln-Lys-Asn-Leu-Ala-Pro-Leu-Val-Glu-Asp-Val-Gln-Ser-Lys-Leu-Lys-Gly-Asn-Thr-Glu-Gly-Leu-Gln-Lys-Ser-Leu-Glu-Asp-Leu-Asn-Lys-Gln-Leu-Asp-Gln-Gln-Val-Glu-Val-Phe-Arg-Arg-Ala-Val-Glu-Pro-Leu-Gly-Asp-Lys-Phe-Asn (SEQ ID NO:10);

Met-Ala-Leu-Val-Gln-Gln (SEQ ID NO:11);

Met-Glu-Lys-Phe-Arg-Gln-Gln-Leu-Gly-Ser-Asp-Ser-Gly-Asp-Val-Glu-Ser-His-Leu-Ser-Phe-Leu-Glu-Lys-Asn-Leu-Arg-Glu-Lys-Val-Ser-Ser-Phe (SEQ ID NO:12);

Met-Ser-Thr-Leu-Gln-Lys-Lys-Gly-Ser-Pro-Asp-Gln-Pro-Leu-Ala-Leu-Pro-Leu-Pro-Glu-Gln-Val-Gln-Glu-Gln-Val-Gln-Glu-Gln-Val-Gln-Pro-Lys-Pro-Leu-Glu-Ser (SEQ ID NO:13);

and derivatives, analogs, homologs, fragments and mixtures thereof.

32. A method according to claim 29 wherein the composition further comprises at least one ingredient selected from the group consisting of carriers, fillers, and excipients.

33. A method according to claim 29 wherein the apolipoprotein A-IV compound makes up about 0.01% to about 10% of the final weight of the food product.

34. A method according to claim 28 wherein the apolipoprotein A-IV compound makes up about 0.02% to about 5% of the final weight of the food product.

35. A method of preventing oxidation in a lipid-containing pharmaceutical comprising incorporating in the pharmaceutical an oxidation-inhibiting amount of an apolipoprotein (apo) A-IV compound to protect the pharmaceutical from oxidation.

36. A method according to claim 35 wherein the apolipoprotein (apo) A-IV compound is selected from the group consisting of apolipoprotein (apo) A-IV, derivatives, analogs, homologs, fragments and mixtures thereof.

37. A method according to claim 36 wherein the apolipoprotein (apo) A-IV molecule is a peptide sequence from about 5 to about 90 amino acids in length.

38. A method according to claim 37 wherein the peptide has an amino acid sequence selected from the group comprising:

Met-Phe-Leu-Lys-Ala-Val-Val-Leu-Thr-Val-Ala-Leu-Val-Ala-Ile-Thr-Gly-Thr-Gln-Ala-Glu-Val-Thr-Ser-Asp-Gln-Val-Ala-Asn-Val (SEQ ID NO:1);

Met-Trp-Asp-Tyr-Phe-Thr-Gln-Leu-Ser-Asn-Asn-Ala-Lys-Glu-Ala-Val-Glu-Gln-Leu-Gln-Lys-Thr-Asp-Val-Thr-Gln-Gln-Leu-Asn-Thr-Leu-Phe-Gln-Asp-Lys-Leu-Gly-Asn-Ile-Asn-Thr-Tyr-Ala-Asp-Asp-Leu-Gln-Asn-Lys-Leu-Val-Pro-Phe-Ala-Val-Gln-Leu-Ser-Gly-His-Leu-Thr-Lys-Glu-Thr-Glu-Arg-Val-Arg-Glu-Glu-Ile-Gln-Lys-Glu-Leu-Glu-Asp-Leu-Arg-Ala-Met-Val-Ile (SEQ ID NO:2);

Met-Leu-Pro-His-Ala-Asn-Lys-Val-Ser-Gln (SEQ ID NO:3);

Met-Phe-Gly-Asp-Asn-Val-Gln-Lys-Leu-Gln-Glu-His-Leu-Arg-Pro-Tyr-Ala-Thr-Asp-Leu-Gln-Ala-Gln-Ile-Asn-Ala-Gln-Thr-Gln-Asp (SEQ ID NO:4);

Met-Lys-Arg-Gln-Leu-Thr-Pro-Tyr-Ile-Gln-Arg (SEQ ID NO:5);

Met-Gln-Thr-Thr-Ile-Gln-Asp-Asn-Val-Glu-Asn-Leu-Gln-Ser-Ser (SEQ ID NO:6);

Met-Val-Pro-Phe-Ala-Asn-Glu-Leu-Lys-Glu-Lys-Phe-Asn-Gln-Asn (SEQ ID NO:7);

Met-Glu-Gly-Leu-Lys-Gly-Gln-Leu-Thr-Pro-Arg-Ala-Asn-Glu-Leu-Lys-Ala-Thr-Ile-Asp-Gln-Asn-Leu-Glu-Asp-Leu-Arg-Ser-Arg-Leu-Ala-Pro-Leu-Ala-Glu-Gly-Val-Gln-Glu-Lys-Leu-Asn-Ile-His-Gln (SEQ ID NO:8);

Met-Glu-Gly-Leu-Ala-Phe-Gln (SEQ ID NO:9);

Met-Lys-Lys-Asn-Ala-Glu-Glu-Leu-His-Thr-Lys-Val-Ser-Thr-Asn-Ile-Asp-Gln-Leu-Gln-Lys-Asn-Leu-Ala-Pro-Leu-Val-Glu-Asp-Val-Gln-Ser-Lys-Leu-Lys-Gly-Asn-Thr-Glu-Gly-Leu-Gln-Lys-Ser-Leu-Glu-Asp-Leu-Asn-Lys-Gln-Leu-Asp-Gln-Gln-Val-Glu-Val-Phe-Arg-Arg-Ala-Val-Glu-Pro-Leu-Gly-Asp-Lys-Phe-Asn (SEQ ID NO:10);

Met-Ala-Leu-Val-Gln-Gln (SEQ ID NO:11);

Met-Glu-Lys-Phe-Arg-Gln-Gln-Leu-Gly-Ser-Asp-Ser-Gly-Asp-Val-Glu-Ser-His-Leu-Ser-Phe-Leu-Glu-Lys-Asn-Leu-Arg-Glu-Lys-Val-Ser-Ser-Phe (SEQ ID NO:12);

Met-Ser-Thr-Leu-Gln-Lys-Lys-Gly-Ser-Pro-Asp-Gln-Pro-Leu-Ala-Leu-Pro-Leu-Pro-Glu-Gln-Val-Gln-Glu-Gln-Val-Gln-Glu-Gln-Val-Gln-Pro-Lys-Pro-Leu-Glu-Ser (SEQ ID NO:13);

and derivatives, analogs, homologs, fragments and mixtures thereof.

39. A method according to claim 38 wherein the composition further comprises at least one ingredient selected from the group consisting of carriers, fillers, and excipients.

40. A method according to claim 38 wherein the Apolipoprotein A-IV compound makes up about 0.01 to about 25% of the final weight of the pharmaceutical product.

41. A method according to claim 38 wherein the apolipoprotein A-IV compound makes up about 0.05% to about 10% of the final weight of the pharmaceutical product.

42. A method of preventing oxidation using a cosmetic or dermatological composition comprising incorporating, in a suitable vehicle containing cosmetic or dermatological composition, an oxidation-inhibiting amount of an apolipoprotein (apo) A-IV compound to protect the containing cosmetic or dermatological composition from oxidation.

43. A method according to claim 42 wherein the apolipoprotein (apo) A-IV compound is selected from the group consisting of apolipoprotein (apo) A-IV, derivatives, analogs, homologs, fragments and mixtures thereof.

44. A method according to claim 43 wherein the apolipoprotein (apo) A-IV molecule is a peptide sequence from about 5 to about 90 amino acids in length.

45. A method according to claim 44 wherein the peptide has an amino acid sequence selected from the group comprising:

Met-Phe-Leu-Lys-Ala-Val-Val-Leu-Thr-Val-Ala-Leu-Val-Ala-Ile-Thr-Gly-Thr-Gln-Ala-Glu-Val-Thr-Ser-Asp-Gln-Val-Ala-Asn-Val (SEQ ID NO:1);

Met-Trp-Asp-Tyr-Phe-Thr-Gln-Leu-Ser-Asn-Asn-Ala-Lys-Glu-Ala-Val-Glu-Gln-Leu-Gln-Lys-Thr-Asp-Val-Thr-Gln-Gln-Leu-Asn-Thr-Leu-Phe-Gln-Asp-Lys-Leu-Gly-Asn-Ile-Asn-Thr-Tyr-Ala-Asp-Asp-Leu-Gln-Asn-Lys-Leu-Val-Pro-Phe-Ala-Val-Gln-Leu-Ser-Gly-His-Leu-Thr-Lys-Glu-Thr-Glu-Arg-Val-Arg-Glu-Glu-Ile-Gln-Lys-Glu-Leu-Glu-Asp-Leu-Arg-Ala-Met-Val-Ile (SEQ ID NO:2);

Met-Leu-Pro-His-Ala-Asn-Lys-Val-Ser-Gln (SEQ ID NO:3);

Met-Phe-Gly-Asp-Asn-Val-Gln-Lys-Leu-Gln-Glu-His-Leu-Arg-Pro-Tyr-Ala-Thr-Asp-Leu-Gln-Ala-Gln-Ile-Asn-Ala-Gln-Thr-Gln-Asp (SEQ ID NO:4);

Met-Lys-Arg-Gln-Leu-Thr-Pro-Tyr-Ile-Gln-Arg (SEQ ID NO:5);

Met-Gln-Thr-Thr-Ile-Gln-Asp-Asn-Val-Glu-Asn-Leu-Gln-Ser-Ser (SEQ ID NO:6);

Met-Val-Pro-Phe-Ala-Asn-Glu-Leu-Lys-Glu-Lys-Phe-Asn-Gln-Asn (SEQ ID NO:7);

Met-Glu-Gly-Leu-Lys-Gly-Gln-Leu-Thr-Pro-Arg-Ala-Asn-Glu-Leu-Lys-Ala-Thr-Ile-Asp-Gln-Asn-Leu-Glu-Asp-Leu-Arg-Ser-Arg-Leu-Ala-Pro-Leu-Ala-Glu-Gly-Val-Gln-Glu-Lys-Leu-Asn-Ile-His-Gln (SEQ ID NO:8);

Met-Glu-Gly-Leu-Ala-Phe-Gln (SEQ ID NO:9);

Met-Lys-Lys-Asn-Ala-Glu-Glu-Leu-His-Thr-Lys-Val-Ser-Thr-Asn-Ile-Asp-Gln-Leu-Gln-Lys-Asn-Leu-Ala-Pro-Leu-Val-Glu-Asp-Val-Gln-Ser-Lys-Leu-Lys-Gly-Asn-Thr-Glu-Gly-Leu-Gln-Lys-Ser-Leu-Glu-Asp-Leu-Asn-Lys-Gln-Leu-Asp-Gln-Gln-Val-Glu-Val-Phe-Arg-Arg-Ala-Val-Glu-Pro-Leu-Gly-Asp-Lys-Phe-Asn (SEQ ID NO:10);

Met-Ala-Leu-Val-Gln-Gln (SEQ ID NO:11);

Met-Glu-Lys-Phe-Arg-Gln-Gln-Leu-Gly-Ser-Asp-Ser-Gly-Asp-Val-Glu-Ser-His-Leu-Ser-Phe-Leu-Glu-Lys-Asn-Leu-Arg-Glu-Lys-Val-Ser-Ser-Phe (SEQ ID NO:12);

Met-Ser-Thr-Leu-Gln-Lys-Lys-Gly-Ser-Pro-Asp-Gln-Pro-Leu-Ala-Leu-Pro-Leu-Pro-Glu-Gln-Val-Gln-Glu-Gln-Val-Gln-Glu-Gln-Val-Gln-Pro-Lys-Pro-Leu-Glu-Ser (SEQ ID NO:13);

and derivatives, analogs, homologs, fragments and mixtures thereof.

46. A method according to claim 45 wherein the composition further comprises at least one ingredient selected from the group consisting of carriers, fillers, and excipients.

47. A method according to claim 45 wherein the apolipoprotein (apo) A-IV compound is present at a concentration between about 0.005% and about 25% by weight with respect to the total weight of the composition.

48. A method according to claim 45 wherein the apolipoprotein (apo) A-IV compound is present at a concentration between about 0.05% and about 10% by weight with respect to the total weight of the composition.

49. A cosmetic or dermatological composition containing, in a suitable vehicle, an oxidation-inhibiting amount of an apolipoprotein (apo) A-IV compound.

50. A composition according to claim 49 wherein the apolipoprotein (apo) A-IV compound is selected from the group consisting of apolipoprotein (apo) A-IV, derivatives, analogs, homologs, fragments and mixtures thereof.

51. A composition according to claim 50 wherein the apolipoprotein (apo) A-IV molecule is a peptide sequence from about 5 to about 90 amino acids in length.

52. A composition according to claim 51 wherein the peptide has an amino acid sequence selected from the group comprising:

Met-Phe-Leu-Lys-Ala-Val-Val-Leu-Thr-Val-Ala-Leu-Val-Ala-Ile-Thr-Gly-Thr-Gln-Ala-Glu-Val-Thr-Ser-Asp-Gln-Val-Ala-Asn-Val (SEQ ID NO:1);

Met-Trp-Asp-Tyr-Phe-Thr-Gln-Leu-Ser-Asn-Asn-Ala-Lys-Glu-Ala-Val-Glu-Gln-Leu-Gln-Lys-Thr-Asp-Val-Thr-Gln-Gln-Leu-Asn-Thr-Leu-Phe-Gln-Asp-Lys-Leu-Gly-Asn-Ile-Asn-Thr-Tyr-Ala-Asp-Asp-Leu-Gln-Asn-Lys-Leu-Val-Pro-Phe-Ala-Val-Gln-Leu-Ser-Gly-His-Leu-Thr-Lys-Glu-Thr-Glu-Arg-Val-Arg-Glu-Glu-Ile-Gln-Lys-Glu-Leu-Glu-Asp-Leu-Arg-Ala-Met-Val-Ile (SEQ ID NO:2);

Met-Leu-Pro-His-Ala-Asn-Lys-Val-Ser-Gln (SEQ ID NO:3);

Met-Phe-Gly-Asp-Asn-Val-Gln-Lys-Leu-Gln-Glu-His-Leu-Arg-Pro-Tyr-Ala-Thr-Asp-Leu-Gln-Ala-Gln-Ile-Asn-Ala-Gln-Thr-Gln-Asp (SEQ ID NO:4);

Met-Lys-Arg-Gln-Leu-Thr-Pro-Tyr-Ile-Gln-Arg (SEQ ID NO:5);

Met-Gln-Thr-Thr-Ile-Gln-Asp-Asn-Val-Glu-Asn-Leu-Gln-Ser-Ser (SEQ ID NO:6);

Met-Val-Pro-Phe-Ala-Asn-Glu-Leu-Lys-Glu-Lys-Phe-Asn-Gln-Asn (SEQ ID NO:7);

Met-Glu-Gly-Leu-Lys-Gly-Gln-Leu-Thr-Pro-Arg-Ala-Asn-Glu-Leu-Lys-Ala-Thr-Ile-Asp-Gln-Asn-Leu-Glu-Asp-Leu-Arg-Ser-Arg-Leu-Ala-Pro-Leu-Ala-Glu-Gly-Val-Gln-Glu-Lys-Leu-Asn-Ile-His-Gln (SEQ ID NO:8);

Met-Glu-Gly-Leu-Ala-Phe-Gln (SEQ ID NO:9);

Met-Lys-Lys-Asn-Ala-Glu-Glu-Leu-His-Thr-Lys-Val-Ser-Thr-Asn-Ile-Asp-Gln-Leu-Gln-Lys-Asn-Leu-Ala-Pro-Leu-Val-Glu-Asp-Val-Gln-Ser-Lys-Leu-Lys-Gly-Asn-Thr-Glu-Gly-Leu-Gln-Lys-Ser-Leu-Glu-Asp-Leu-Asn-Lys-Gln-Leu-Asp-Gln-Gln-Val-Glu-Val-Phe-Arg-Arg-Ala-Val-Glu-Pro-Leu-Gly-Asp-Lys-Phe-Asn (SEQ ID NO:10);

Met-Ala-Leu-Val-Gln-Gln (SEQ ID NO:11);

Met-Glu-Lys-Phe-Arg-Gln-Gln-Leu-Gly-Ser-Asp-Ser-Gly-Asp-Val-Glu-Ser-His-Leu-Ser-Phe-Leu-Glu-Lys-Asn-Leu-Arg-Glu-Lys-Val-Ser-Ser-Phe (SEQ ID NO:12);

Met-Ser-Thr-Leu-Gln-Lys-Lys-Gly-Ser-Pro-Asp-Gln-Pro-Leu-Ala-Leu-Pro-Leu-Pro-Glu-Gln-Val-Gln-Glu-Gln-Val-Gln-Glu-Gln-Val-Gln-Pro-Lys-Pro-Leu-Glu-Ser (SEQ ID NO:13);

and derivatives, analogs, homologs, fragments and mixtures thereof.

53. The cosmetic or dermatological composition of claim 52 wherein the composition is in the form of a suspension or dispersion in a solvent or a fatty substance, or in the form of an emulsion, or in the form of an ointment, a gel, a solid stick or an aerosol foam.

54. The cosmetic or dermatological composition of claim 52 in a form wherein the cosmetically acceptable carrier is selected from the group consisting of a lotion, a gel, a cream, a milk, a powder, a solid stick, a foam and a spray.

55. The cosmetic or dermatological composition according to claim 52, wherein the composition additionally contains cosmetic adjuvants selected from the group consisting of lower alcohols, polyols, esters of, fatty acids, oils, and waxes, solvents, silicones, thickeners, emollients, UV-A, UV-B and broad band sunscreens, antifoam agents, hydrating agents, perfumes, stabilizers, surfactants, fillers, sequestrants, anionic, cationic, nonionic and amphoteric polymers and mixtures thereof, propellants, alkalifying and acidifying agents, dyes and metal oxide pigments.

56. The composition according to claim 52, wherein the apolipoprotein A-IV compound is present at a concentration between about 0.005% and about 15% by weight with respect to the total weight of the composition.

57. The cosmetic or dermatological composition of claim 52 which further contains either at least one basic agent or includes at least one tocopherol or a derivative.

58. The cosmetic or dermatological composition of claim 57 wherein the composition contains from about 0.5 to about 20 weight percent of a tocopherol or derivative thereof, about 0.5 to about 50 weight percent of a basic agent and about 0.5 to about 90 weight percent of the apolipoprotein A-IV compound.

59. The cosmetic or dermatological composition of claim 58 wherein the basic agent is selected from the group consisting of sodium hydroxide, triethanolamine, a basic amino acid, such as lysine or arginine and mixtures thereof.

60. The cosmetic or dermatological composition of claim 57 wherein the composition contains from about 0.05 to about 2.0 weight percent of a tocopherol or derivative thereof, about 0.05 to about 5.0 weight percent of a basic agent and about 0.05 to about 9.0 weight percent of the apolipoprotein A-IV compound.

61. The cosmetic or dermatological composition of claim 57 wherein the composition additionally contains one or more compounds selected from the group consisting of wetting agents; depigmenting agents such as hydroquinone, azelaic acid, caffeic acid or kojic acid; emollients; moisturizing agents such as glycerol, PEG 400, thiamorpholinone and its derivatives or alternatively urea; antiseborrhoeic or antiacne agents such as S-carboxymethylcysteine, S-benzylcysteamine, salts or derivatives thereof, benzoyl peroxide; antibiotics such as erythromycin and esters thereof, neomycin, clindamycin and esters thereof, tetracyclines; antifungal agents such as ketoconazole or 4,5-polymethylene-3-isothiazolidones; agents promoting hair regrowth, such as Minoxidil (2,4-diamino-6-piperidinopyrimidine 3-oxide) and derivatives thereof, Diazoxide (7-chloro-3-methyl-1,2,4-benzothiadiazine-1,1-dioxide) and Phenytoin (5,4-diphenyl-2,4-imidazolidinedione); non-steroidal anti-inflammatory agents; carotenoids and especially beta -carotene; anti-psoriatic agents such as anthralin and derivatives thereof; 5,8,11,14-eicosatetraynoic and 5,8,11-eicosatrynoic acids and esters and amides thereof; taste- or flavor-enhancing agents; preservatives such as parahydroxybenzoic acid esters; stabilizing agents; moisture regulating agents;

Sub A2

pH regulating agents; osmotic pressure modifying agents; emulsifying agents; UV-A and UV-B screening agents; and other antioxidants such as alpha -tocopherol, butylated hydroxyanisole or butylated hydroxytoluene.

62. Cosmetic composition according to claim 60, wherein the composition additionally contains cosmetic adjuvants selected from the group consisting of lower alcohols, polyols, esters of, fatty acids, oils, and waxes, solvents, silicones, thickeners, emollients, UV-A, UV-B and broad band sunscreens, antifoam agents, hydrating agents, perfumes, stabilizers, surfactants, fillers, sequestrants, anionic, cationic, nonionic and amphoteric polymers and mixtures thereof, propellants, alkalifying and acidifying agents, dyes and metal oxide pigments.